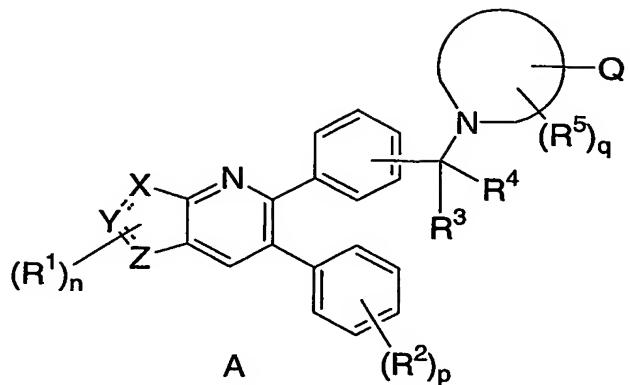


WHAT IS CLAIMED IS:

1. A compound of the Formula A:

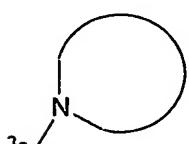


5 wherein:

a is 0 or 1; b is 0 or 1; m is 0, 1 or 2; n is 0, 1, 2 or 3; p is 0, 1 or 2; q is 0, 1, 2 or 3; r is 0 or 1; s is 0 or 1; t is 2, 3, 4, 5 or 6;

10 X, Y and Z are independently selected from: C, N, S or O provided that at least one of X, Y or Z is N, S or O;

dashed line represents an optional double bond;



15 is heterocyclyl;

Q is selected from: -NR⁶R⁷, aryl and heterocyclyl, said aryl and heterocyclyl is optionally substituted with one to three R²;

20 R¹ is independently selected from: 1) (C=O)_aO_bC₁-C₁₀ alkyl, 2) (C=O)_aO_baryl, 3) C₂-C₁₀ alkenyl, 4) C₂-C₁₀ alkynyl, 5) (C=O)_aO_b heterocyclyl, 6) (C=O)_aO_bC₃-C₈ cycloalkyl, 7) CO₂H, 8) halo, 9) CN, 10) OH, 11) O_bC₁-C₆ perfluoroalkyl, 12) O_a(C=O)_bNR⁶R⁷, 13) NR^c(C=O)NR⁶R⁷, 14) S(O)_mR^a, 15) S(O)₂NR⁶R⁷, 16) NR^cS(O)_mR^a, 17) oxo, 18) CHO, 19) NO₂, 20) NR^c(C=O)O_bR^a, 21) O(C=O)O_bC₁-C₁₀ alkyl.

C₁₀ alkyl, 22) O(C=O)O_bC₃-C₈ cycloalkyl, 23) O(C=O)O_baryl, 24) O(C=O)O_b-heterocycle, 25) H, and 26) O_a-P=O(OH)₂, said alkyl, aryl, alkenyl, alkynyl, heterocyclyl, and cycloalkyl optionally substituted with one or more substituents selected from R₂;

5 R² is independently selected from: 1) (C=O)_aO_bC₁-C₁₀ alkyl, 2) (C=O)_aO_baryl, 3) C₂-C₁₀ alkenyl, 4) C₂-C₁₀ alkynyl, 5) (C=O)_aO_b heterocyclyl, 6) (C=O)_aO_bC₃-C₈ cycloalkyl, 7) CO₂H, 8) halo, 9) CN, 10) OH, 11) O_bC₁-C₆ perfluoroalkyl, 12) O_a(C=O)_bNR⁶R⁷, 13) NR^c(C=O)NR⁶R⁷, 14) S(O)_mR^a, 15) S(O)₂NR⁶R⁷, 16) NR^cS(O)_mR^a, 17) CHO, 18) NO₂, 19) NR^c(C=O)O_bR^a, 20) O(C=O)O_bC₁-C₁₀ alkyl, 21) O(C=O)O_bC₃-C₈ cycloalkyl, 22) O(C=O)O_baryl, 23) O(C=O)O_b-heterocycle, and 24) O_a-P=O(OH)₂, said alkyl, aryl, alkenyl, alkynyl, heterocyclyl, and cycloalkyl optionally substituted with one, two or three substituents selected from R₂;

R³ and R⁴ are independently selected from: H, C₁-C₆-alkyl and C₁-C₆-perfluoroalkyl, or

15 R³ and R⁴ are combined to form -(CH₂)_t- wherein one of the carbon atoms is optionally replaced by a moiety selected from O, S(O)_m, -N(R^b)C(O)-, and -N(COR^a)-;

R⁵ is independently selected from: 1) (C=O)_aO_bC₁-C₁₀ alkyl, 2) (C=O)_aO_baryl, 3) C₂-C₁₀ alkenyl, 4) C₂-C₁₀ alkynyl, 5) (C=O)_aO_b heterocyclyl, 6) (C=O)_aO_bC₃-C₈ cycloalkyl, 7) CO₂H, 8) halo, 9) CN, 10) OH, 11) O_bC₁-C₆ perfluoroalkyl, 12) O_a(C=O)_bNR⁶R⁷, 13) NR^c(C=O)NR⁶R⁷, 14) S(O)_mR^a, 15) S(O)₂NR⁶R⁷, 16) NR^cS(O)_mR^a, 17) oxo, 18) CHO, 19) NO₂, 20) O(C=O)O_bC₁-C₁₀ alkyl, 21) O(C=O)O_bC₃-C₈ cycloalkyl, and 22) O_a-P=O(OH)₂, said alkyl, aryl, alkenyl, alkynyl, heterocyclyl, and cycloalkyl optionally substituted with one or more substituents selected from R₂;

25 R⁶ and R⁷ are independently selected from: 1) H, 2) (C=O)O_bR^a, 3) C₁-C₁₀ alkyl, 4) aryl, 5) C₂-C₁₀ alkenyl, 6) C₂-C₁₀ alkynyl, 7) heterocyclyl, 8) C₃-C₈ cycloalkyl, 9) SO₂R^a, 10) (C=O)NR^b₂, 11) OH, and 12) O_a-P=O(OH)₂, said alkyl, cycloalkyl, aryl, heterocyclyl, alkenyl, and alkynyl is optionally substituted with one or more substituents selected from R₂, or

30 R⁶ and R⁷ can be taken together with the nitrogen to which they are attached to form a monocyclic or bicyclic heterocycle with 4-7 members in each ring and optionally containing, in addition to the nitrogen, one or more additional heteroatoms selected from N, O and S, said monocyclic or bicyclic heterocycle optionally substituted with one or more substituents selected from R₂;

R^Z is selected from: 1) (C=O)_rO_s(C₁-C₁₀)alkyl, 2) O_r(C₁-C₃)perfluoroalkyl, 3) (C₀-C₆)alkylene-S(O)_mR^a, 4) oxo, 5) OH, 6) halo, 7) CN, 8) (C=O)_rO_s(C₂-C₁₀)alkenyl, 9) (C=O)_rO_s(C₂-C₁₀)alkynyl, 10) (C=O)_rO_s(C₃-C₆)cycloalkyl, 11) (C=O)_rO_s(C₀-C₆)alkylene-aryl, 12) (C=O)_rO_s(C₀-C₆)alkylene-heterocyclyl, 13) (C=O)_rO_s(C₀-C₆)alkylene-N(R^b)₂, 14) C(O)R^a, 15) (C₀-C₆)alkylene-CO₂R^a, 16) 5) C(O)H, 17) (C₀-C₆)alkylene-CO₂H, 18) C(O)N(R^b)₂, 19) S(O)_mR^a, 20) S(O)₂N(R^b)₂, 21) NR^c(C=O)O_bR^a, 22) O(C=O)O_bC₁-C₁₀ alkyl, 23) O(C=O)O_bC₃-C₈ cycloalkyl, 24) O(C=O)O_baryl, 25) O(C=O)O_b-heterocycle, and 26) O_a-P=O(OH)₂, said alkyl, alkenyl, alkynyl, cycloalkyl, aryl, and heterocyclyl is optionally substituted with up to three substituents selected from R^b, OH, (C₁-C₆)alkoxy, halogen, CO₂H, CN, O(C=O)C₁-C₆ alkyl, oxo, N(R^b)₂ and O_a-P=O(OH)₂;

10

R^a is: substituted or unsubstituted (C₁-C₆)alkyl, substituted or unsubstituted (C₂-C₆)alkenyl, substituted or unsubstituted (C₂-C₆)alkynyl, substituted or unsubstituted (C₃-C₆)cycloalkyl, substituted or unsubstituted aryl, (C₁-C₆)perfluoroalkyl, 2,2,2-trifluoroethyl, or substituted or unsubstituted heterocyclyl; and

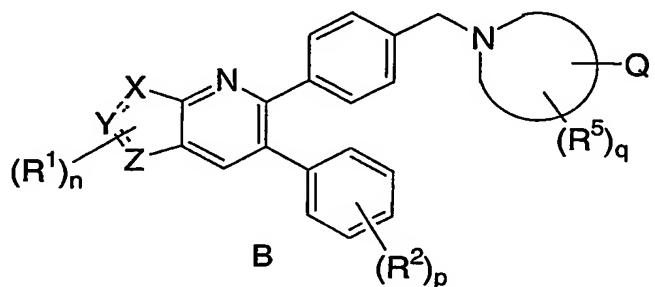
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R^b is: H, (C₁-C₆)alkyl, substituted or unsubstituted aryl, substituted or unsubstituted benzyl, substituted or unsubstituted heterocyclyl, (C₃-C₆)cycloalkyl, (C=O)OC₁-C₆ alkyl, (C=O)C₁-C₆ alkyl or S(O)₂R^a;

20 R^c is selected from: 1) H, 2) C₁-C₁₀ alkyl, 3) aryl, 4) C₂-C₁₀ alkenyl, 5) C₂-C₁₀ alkynyl, 6) heterocyclyl, 7) C₃-C₈ cycloalkyl, and 8) C₁-C₆ perfluoroalkyl, said alkyl, cycloalkyl, aryl, heterocyclyl, alkenyl, and alkynyl is optionally substituted with one or more substituents selected from R^Z, or or a pharmaceutically acceptable salt or a stereoisomer thereof.

25

2. The compound according to Claim 1 of the Formula B:

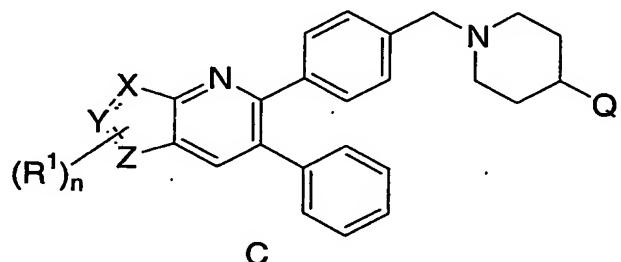


wherein:

R² is independently selected from: 1) C₁-C₆ alkyl, 2) aryl, 3) heterocyclyl, 4) CO₂H, 5) halo, 6) CN, 7) OH, 8) S(O)₂NR⁶R⁷, and 9) O_a-P=O(OH)₂, said alkyl, aryl and heterocyclyl optionally substituted with one, two or three substituents selected from R²;

5 or a pharmaceutically acceptable salt or a stereoisomer thereof.

3. The compound according to Claim 2 of the Formula C:



wherein:

10

Q is heterocyclyl, said heterocyclyl is optionally substituted with 1 to 3 R²;

or a pharmaceutically acceptable salt or a stereoisomer thereof.

15

4. A compound which is selected from:

1-{1-[4-(3-amino-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one;

20 1-{1-[4-(3-amino-1-methyl-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one;

1-(1-{4-[3-amino-1-(2-morpholin-4-ylethyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl]benzyl}piperidin-4-yl)-1,3-dihydro-2H-benzimidazol-2-one;

1-(1-{4-[3-amino-1-(2-hydroxyethyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl]benzyl}piperidin-4-yl)-1,3-dihydro-2H-benzimidazol-2-one;

25 1-[1-(4-(3-amino-1-[2-(1H-imidazol-4-yl)ethyl]-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl]-1,3-dihydro-2H-benzimidazol-2-one;

1-methyl-6-(4-([4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl)phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-amine;

9-{1-[4-(3-amino-1-methyl-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-9H-purin-6-amine;

1-methyl-6-(4-([4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl)phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-ol;

5 N-ethyl-N'-[1-methyl-6-(4-([4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl]methyl)phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-yl]urea;

N-[1-methyl-6-(4-([4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl]methyl)phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-yl]acetamide;

Methyl-3-amino-6-(4-([4-(6-fluoro-1H-benzimidazol-2-yl)piperidin-1-yl]methyl)phenyl)-5-phenylfuro[2,3-b]pyridine-2-carboxylate;

5-(4-([4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl)phenyl)-6-phenyl-1,3-dihydro-2H-imidazo[4,5-b]pyridin-2-one;

5-(4-([4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl)phenyl)-6-phenyl-1H-[1,2,3]triazolo[4,5-b]pyridine; and

15 5-(4-([4-(2-Methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl)phenyl)-6-phenyl-1H-imidazo[4,5-b]pyridine;

or a pharmaceutically acceptable salt or a stereoisomer thereof.

20 5. The TFA salt of a compound according to Claim 1 which is:

1-{1-[4-(3-amino-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one;

25 1-{1-[4-(3-amino-1-methyl-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one;

1-(1-{4-[3-amino-1-(2-morpholin-4-ylethyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl]benzyl}piperidin-4-yl)-1,3-dihydro-2H-benzimidazol-2-one;

1-(1-{4-[3-amino-1-(2-hydroxyethyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl]benzyl}piperidin-4-yl)-1,3-dihydro-2H-benzimidazol-2-one;

30 1-[1-(4-{3-amino-1-[2-(1H-imidazol-4-yl)ethyl]-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl}benzyl)piperidin-4-yl]-1,3-dihydro-2H-benzimidazol-2-one;

1-methyl-6-(4-([4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl]methyl)phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-amine;

35 9-{1-[4-(3-amino-1-methyl-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-9H-purin-6-amine;

1-methyl-6-(4-{{4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl}methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-ol;

N-ethyl-N'-[1-methyl-6-(4-{{4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl}methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-yl]urea;

5 N-[1-methyl-6-(4-{{4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl}methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-yl]acetamide; and

Methyl-3-amino-6-(4-{{4-(6-fluoro-1H-benzimidazol-2-yl)piperidin-1-yl}methyl}phenyl)-5-phenylfuro[2,3-b]pyridine-2-carboxylate;

10 or a stereoisomer thereof.

6. A compound according to Claim 4 which is selected from:

15 1-{{1-[4-(3-amino-5-phenyl-1H-pyrazolo[3,4-b]pyridin-6-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one;

N-ethyl-N'-[1-methyl-6-(4-{{4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl}methyl}phenyl)-5-phenyl-1H-pyrazolo[3,4-b]pyridin-3-yl]urea;

Methyl-3-amino-6-(4-{{4-(6-fluoro-1H-benzimidazol-2-yl)piperidin-1-yl}methyl}phenyl)-5-phenylfuro[2,3-b]pyridine-2-carboxylate;

20 5-(4-{{4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl}methyl}phenyl)-6-phenyl-1,3-dihydro-2H-imidazo[4,5-b]pyridin-2-one;

5-(4-{{4-(2-methyl-1H-benzimidazol-1-yl)piperidin-1-yl}methyl}phenyl)-6-phenyl-1H-[1,2,3]triazolo[4,5-b]pyridine; and

25 5-(4-{{4-(2-Methyl-1H-benzimidazol-1-yl)piperidin-1-yl}methyl}phenyl)-6-phenyl-1H-imidazo[4,5-b]pyridine;

or a pharmaceutically acceptable salt or a stereoisomer thereof.

30 7. A pharmaceutical composition comprising a pharmaceutical carrier, and dispersed therein, a therapeutically effective amount of a compound of Claim 1.

8. A pharmaceutical composition comprising a pharmaceutical carrier, and dispersed therein, a therapeutically effective amount of a compound of Claim 4.

9. A method of inhibiting one or more of the isoforms of Akt in a mammal which comprises administering to the mammal a therapeutically effective amount of a compound of Claim 1.

5 10. A method of inhibiting one or more of the isoforms of Akt in a mammal which comprises administering to the mammal a therapeutically effective amount of a compound of Claim 4.

11. A method for treating cancer which comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 1.

10 12. A method for treating cancer which comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 4.

15 13. A method for treating a non-malignant disease in which angiogenesis is implicated which comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 1.

20 14. A method for treating a non-malignant disease in which angiogenesis is implicated which comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 4.

25 15. The composition of Claim 7 further comprising a second compound selected from: 1) an estrogen receptor modulator, 2) an androgen receptor modulator, 3) a retinoid receptor modulator, 4) a cytotoxic/cytostatic agent, 5) an antiproliferative agent, 6) a prenyl-protein transferase inhibitor, 7) an HMG-CoA reductase inhibitor, 8) an HIV protease inhibitor, 9) a reverse transcriptase inhibitor, 10) an angiogenesis inhibitor, 11) a PPAR- γ agonist, 12) a PPAR- δ agonist, 13) an inhibitor of cell proliferation and survival signaling, and 14) an agent that interferes with a cell cycle checkpoint.

30 16. A method of treating cancer which comprises administering a therapeutically effective amount of a compound of Claim 1 in combination with radiation therapy.

17. A method of treating hyperproliferative disorders selected from restenosis, inflammation, autoimmune diseases and allergy/asthma which comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 1.

18. A method of treating hyperinsulinism which comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 1.